

GSM/GPRS/GPS PORTABLE VEHICLE TRACKER USER MANUAL



Preface

Thank you for purchasing the tracker. This manual shows how to operate the device smoothly and correctly. Make sure to read this manual carefully before using this product. Please note that specification and information are subject to changes without prior notice in this manual.

Any change will be integrated in the latest release. The manufacturer assumes no responsibility for any errors or omissions in this document.

Contents

1. Introduction.....	3
2. Applications	3
3. Hardware Description	3
4. Accessories	5
5. Specs.....	5
6. Installation and operation	6
6.1. Production installation	6
6.2. INT & EXT switch	7
6.3. SIM card installation	7
6.4. Battery Charging	8
6.5. LED indicator status	8
6.6. Initialization.....	9
6.7. Change Password	9
6.8. Add and Delete Authorization.....	9
6.9. Single Locating.....	9
6.10. Auto track continuously.....	10
6.10.1. Track with limited times upon time interval.....	10
6.10.2. Track with unlimited times upon time interval	10
6.10.3. Smart track upon time and distance interval:	10
6.11. Automatic update positions of vehicle turns	11
6.12. GPS drift suppression	11
6.13. Exact street address	11
6.14. Location based service (LBS) / Cell-ID Locating.....	11
6.15. Monitor (Voice Surveillance)	12
6.16. Data logging	12
6.17. Data Load	12
6.18. Forward the third parties' message	13
6.19. SIM card Balance Inquiry	13
6.20. Cut off the Oil and Power System	13
6.21. Decide how many times of alarm message	14
6.22. Alarms.....	14
6.22.1. Low battery alarm.....	14
6.22.2. Power off alarm	14
6.22.3. GPS blind Spot alert	14
6.22.4. SOS	14
6.22.5. Geo-fence.....	15
6.22.6. Multi-area management	15
6.22.7. Movement alarm.....	15

6.22.8.	Over speed alarm.....	16
6.22.9.	Built in Shock Sensor Alarm	16
6.23.	Sleep Mode.....	16
6.23.1.	Sleep by time.....	18
6.23.2.	Sleep by shock.....	18
6.23.3.	Deep Sleep by Shock	18
6.23.4.	Awake according to schedule	19
6.23.5.	No sleep mode.....	19
6.24.	Check the Vehicle State	19
6.25.	Check IMEI	19
6.26.	Terminal (local) Time Setting	20
6.27.	Reset Hardware.....	20
6.28.	Configure parameters by USB	20
6.29.	GPRS configuration	20
6.30.	Less GPRS traffic.....	21
6.31.	Set up monitor center number	21
6.32.	Instructions for web platform and mobile APP	223
7.	Cautions	278
8.	Faults & the Solutions.....	278

1. Introduction

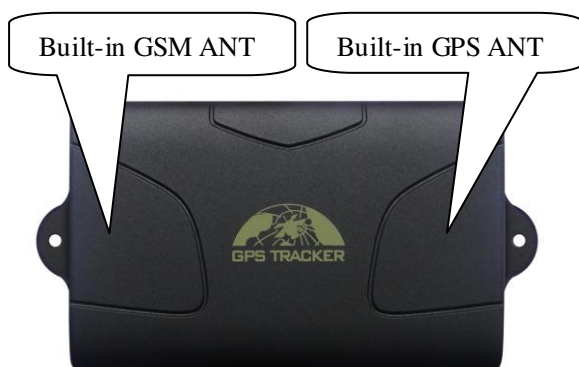
- 1.1. This tracker is a new product based on the GSM / GPRS network and GPS satellite positioning system, which set multiple functions of security, positioning, monitoring surveillance, emergency alarms and tracking in its entirety. It can track and monitor remote target by SMS or internet.
- 1.2. Main Features
 - 1.2.1. Waterproof shell
 - 1.2.2. Built-in large capacity 6000MA battery, standby about 4 months in sleep mode and 12 months in deep sleep mode.
 - 1.2.3. Powerful magnets to absorb to vehicle firmly.
 - 1.2.4. Real-time tracking, retrieve of lost vehicles, cargo.
 - 1.2.5. Movement alarm, Geo-fence alarm, Shock alarm, remote monitoring.
 - 1.2.6. Support map viewing on mobile phone screen, get exact address by SMS, GPRS real time tracking on web based server.
 - 1.2.7. Built-in high sensitivity GPS and GSM antenna to make it can be used alone without installation, convenient and quick.
 - 1.2.8. Support for external GSM antenna & GPS antenna, and external power supply for the tracker to be installed on the device which can provide power for long-term using.

2. Applications

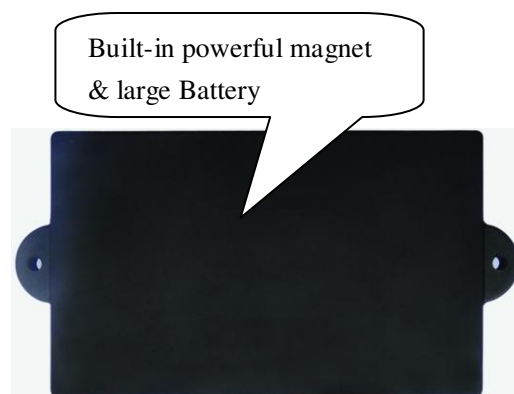
Application: Locating and tracking service for cars, trucks, container trucks, special vehicles, cargo and criminal investigation officer.

3. Hardware Description

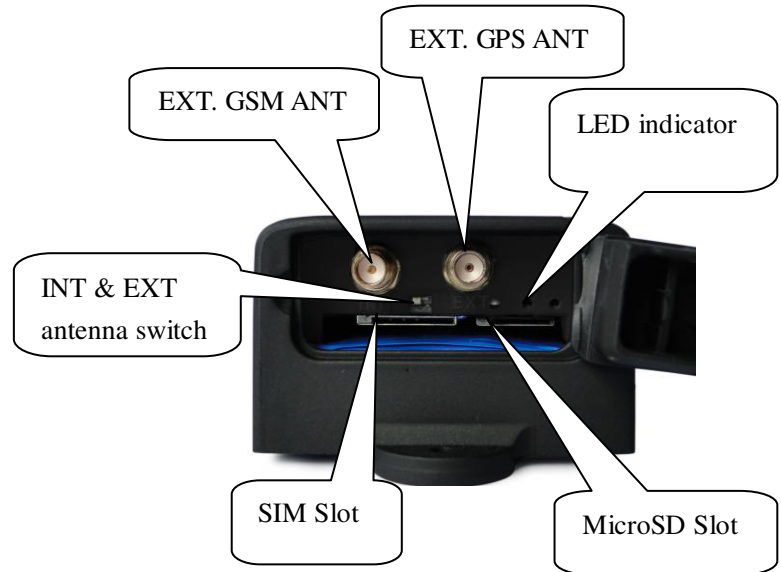
3.1 Front face



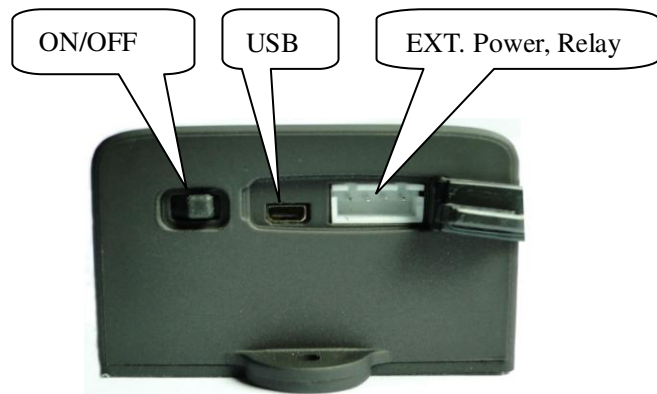
3.2 Rear face



3.3 Side face



3.4 Side face



3.5 Side face



4. Accessories

No.	Pictures	Name	Specs
1		AC Adapter	Input: AC 110-220V, Output DC: 1.5A, 12V
2		Lighter car adapter	Car 12V OR 24V power
3		GPS Antenna	2 meters
4		GSM Antenna	2 meters
5		Harness	4PIN
6		Relay	12V/40A OR 24V/40A depends on the vehicle type

5. Specs

Content	specifications
DIM.	94mm*60mm*38mm
Weight	300g
Network	GSM/GPRS
Band	850/900/1800/1900Mhz

GPS sensitivity	-159dBm	
GPS Accuracy	5m	
GPS Start time	Cold status	45s
	Hot status	1s
EXT. power	DC 12 V -24V	
Operating Current	Sleep Current	1.8mA
	Deep sleep	0.6mA
	GSM operating Current	68mA \pm 3mA
	GPRS Current(data transfer)	82mA \pm 10mA
Battery	3.7V 6000mA/h Polymer battery	
Charge current	1A \pm 0.2A	
Charge time	7h	
Standby time	Sleep	4 months
	Deep sleep	12 months
Storage Temp.	-40°C to +85°C	
Operation Temp.	-20°C to +70°C	
Humidity	5%--95% non-condensing	

6. Installation and operation

6.1. Production installation

- 6.1.1.** The product is easy to install. The built-in powerful magnet can make it to be directly adsorbed on the iron objects.
- 6.1.2.** Built-in GPS and GSM antenna, external antenna can be optional.
- 6.1.3.** The tracker is waterproof, but please still avoids the long-term placement in the places of water infiltration.
- 6.1.4.** If you need an external power supply, cut oil & power system and SOS feature, please find 4PIN main wire, wiring diagram as follows:



Please make sure that the SIM card is GSM network and able to execute the function of incoming calls display, no calls can be diverted and the PIN code is locked. The SMS format must be TXT format, and can't recognize the PDU format.

6.4. Battery Charging

Please fully charge the product for the first use and charge as following:

Home charge: Find the AC adapter from the accessories and connect 4-PIN plug into 4-PIN socket, and then connect the other end to mains supply.

Car charge: Find the car lighter charger from the accessories and connect to car cigarette lighter.

Note: Red LED ON means being charged, and LED OFF means fully charged, and then charging can be stopped. If the battery can't be fully charged once, then unplug the charger for about 10 minutes and then charge it one more time.

6.5. LED indicator status

Indicator	Status	
Power LED (Red)	Flash quickly	Low battery
	ON	Charging
	OFF	Charged
GSM LED (Green)	ON	No GSM Network
	Flash quickly, 1 second/ flash	GSM mode
	Flash slowly, 3 seconds/flash	GPRS mode
GPS LED (Blue)	OFF	Lost fix to satellites
	Flash quickly, 1 second/ flash	Fix to satellites

6.6. Initialization

Send SMS "begin+password" to tracker, it will reply "begin ok" and return to the default factory settings. (Default password is: 123456). For example: Send SMS "begin123456" to tracker, it will reply "begin ok".

6.7. Change Password

- 6.7.1. Send SMS "password+old password+space+new password" to the tracker to change the password. For example: Send SMS "password123456 888888" to tracker, it will reply "password OK", it means the password has changed successfully. And please keep the new password in mind.
- 6.7.2. Note: The new password must be 6 digits Arabic numbers, or the tracker can't recognize.
- 6.7.3. When reading this user manual, you will notice that we have used "+" and "space" between some words; "+" between two words means they should be written together as one word and "space" between two words means you should leave one character space between two words.

6.8. Add and Delete Authorization

- 6.8.1. You must setup the authorized phone number before using SOS, geo-fence alarm, etc. Up to 5 numbers can be authorized.
- 6.8.2. Call the tracker for 10 times continuously and get its position, then it will save the cell phone number as the authorized number automatically. and reply "add master ok".
- 6.8.3. Authorization: Send SMS "admin+password+space+cell phone number" to set up an authorized number, the other authorized numbers should be set by the first authorized number, if the number is successfully authorized, the unit will reply " admin OK" by SMS.
- 6.8.4. Delete authorization: Send SMS "noadmin+password+space+authorized number" to delete the authorized number.
- 6.8.5. If you want to track the target when it enters into another country, you must add the country code before the cell phone number. You should authorize your number in international format as follows: "admin123456 008613322221111" to tracker to set 13322221111 as an authorized number.

6.9. Single Locating

- 6.9.1. If there aren't any authorized number set-up, it will reply all calls with a location report; if there are authorized numbers set-up, then it will not respond when an

unauthorized number calls it.

- 6.9.2.** If you call it from authorized phone number, it will hang up and report a real-time location as below:



- 6.9.3.** When lost fix to satellites, it will track by LBS / CELL-ID. And the SMS will include two positions:

- GPS coordinates of the last known position.
- LAC code Open web platform and find “manual track”, put code received from tracker in LAC and Cell-ID fields to locate by LBS technology

6.10. Auto track continuously

6.10.1. Track with limited times upon time interval

Send SMS command “fix030s005n +password” to the tracker device, it will report the latitude & longitude at intervals of 30 seconds for 5 times. (s:second, m:minute, h:hour). This command set must be in 3 digits Arabic numbers and the maximum value is 255.

e.g. fix030s005n123456

6.10.2. Track with unlimited times upon time interval

Send SMS “fix030s***n+password” to the tracker device, it will reply the latitude & longitude continuously at 30 seconds intervals.

Note: the interval must not less than 20s.

6.10.3. Smart track upon time and distance interval:

6.10.3.1. Please set "track with unlimited times upon time interval" before this function, and

send "distance+password+space+distance", tracker will reply "Distance ok", and then tracker will locate upon both the pre-set time and distance.

E.G: Send "distance123456 0050", it means distance is 50 meters; the number must be 4 digits Arabic numbers.

- 6.10.3.2. Set this function on web server: Set time interval first and then distance interval, tracker will locate upon the time and distance.
- 6.10.3.3. Cancel: Send SMS “nofix+password” to the tracker device to cancel the “auto track”.

6.11. Automatic update positions of vehicle turns

- 6.11.1.** The tracker will update the positions automatically to web server once the vehicle changing driving direction over pre set angle value to form a smooth trajectory consistent with the actual road, this function is only effective in GPRS mode.
- 6.11.2.** Send "angle+password+space+angle" to tracker, it will reply" angle ok". E.g angle123456 040
- 6.11.3.** The angle must be 3 digits Arabic numbers, default angle value is 30 degrees.

6.12. GPS drift suppression

- 6.12.1.** This function is deactivated by default, to activate this function, send SMS "suppress+password" to activate it, tracker will reply" suppresses drift ok". The GPS data stop updating if vehicle is not driving and latitude and longitude always keep same, and GPS data updates automatically when vehicle is moving.
- 6.12.2.** Cancel: send "nosuppress+password" to tracker, it will reply" nosuppress ok"

6.13. Exact street address

- 6.13.1.** You must set up the APN of your local GSM network for the SIM card in tracker first before using this function, if there is user name and password for GPRS login, Please refer to 6.29 section of this manual to configure the APN, user name and password for GPRS login.
- 6.13.2.** After configure the APN, send "address+password" to device, it will reply SMS including exact street/address name. For example: No.113, Guankou 2nd Rd, Nantou, Nanshan district, Shenzhen, Guangdong, china.

6.14. Location based service (LBS) / Cell-ID Locating

If the tracker cannot establish a solid GPS Fix, it will calculate its location using Cell-ID GSM locating, Location reports will include the GPS coordinates of the last known positions as well as a LAC code, Entering the LAC code to the “Manual Track” menu of web tracking platform www.gpstrackerxy.com will enable you to see the tracker’s current location. You can also send

command “address+password” to the tracker to request exact address, track will automatically switch to tracking by LBS in GPRS mode. Accuracy of LBS depends on the distance to the nearest GSM Network Cell Tower or Base Station.

Note: This feature can be used normally in most areas according to the signal of GSM network. It may not be available in some areas.

6.15. Monitor (Voice Surveillance)

6.15.1. The command to switch between Track and Monitor are “track” and “monitor”. The default mode is track mode.

6.15.2. Send SMS “monitor+password” to the unit, and it will reply “monitor ok!” and switch to “monitor” mode.

6.15.3. Send SMS “tracker+password” to the unit, it will reply “tracker ok!” and restore to “track” mode.

6.16. Data logging

6.16.1. Auto logging: When the tracker device lost GSM signals or fall offline from GPRS, tracker will log the tracking position and alerts automatically in the SD card on the basis of the pre-set condition, when GSM signals get back, all the event alerts will be auto-sent to the authorized numbers or monitoring platform (server), but the logged tracking data should be loaded to the monitoring platform via SMS command.

6.16.2. Logging upon times: Send SMS: “save030s005n+password” to the tracker unit, it will reply “save ok”, and will log the lat, long locations every 30 seconds for 5 times. (S: second, m: minute; h: hour).

6.16.3. Multi-logging: Send SMS: “save030s***n+password” to tracker device, it will reply “save ok”.

6.16.4. Cancel logging: Send SMS “nosave+password”, e.g. nosave123456

6.16.5. Logging Clearance: send SMS: “clear+password” to tracker device, it will reply “clear ok”.

6.16.6. It depends on the capacity of the SD card inserted in the tracker device.

6.16.7. The logged data in SD card can be copied to computers, and then the data route can be checked by importing data in the menu “Data Import” of web platform www.gpstrackerxy.com

6.17. Data Load

6.17.1. Current date Load: Send SMS: “load+ password” to tracker device, it will reply: “load ok” if the device is working well under GPRS mode; if not, it will reply “load fail! Please

check gprs” that means device does not work under GPRS mode.

- 6.17.2.** Specified date Load: Send SMS: “load+ password+ space+ year month date” to tracker device, it will reply: “load ok” and load the tracking data to the web platform upon the valid time you choose. For Example: send SMS: “load123456 20110425” to the tracker device, means to load the tracking data of 25th April 2011 to web platform.

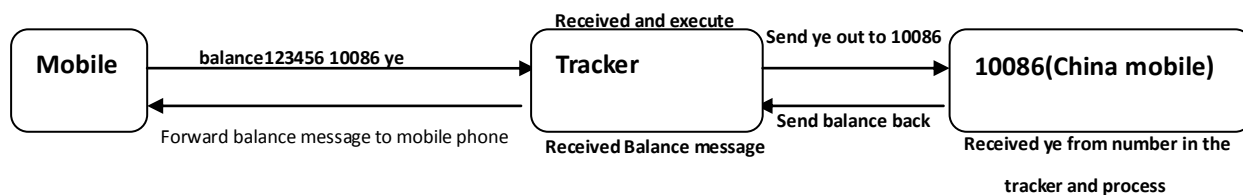
6.18. Forward the third parties’ message

- 6.18.1.** Send SMS "forward+password+space+third parties phone number" from authorized phone number, tracker will reply"forward ok", and supports 1 third parties phone numbers at most.
- 6.18.2.** For example, set the phone number of the service provider of the SIM card in the tracker, when charge remind message coming in, tracker will forward it to authorized phone number.
- 6.18.3.** Cancel: Send SMS command "noforward+password".

6.19. SIM card Balance Inquiry

- 6.19.1.** Send SMS command "balance+password+space+carrier’s phone number+space+code" to tracker, it will forward the code to carrier’s phone number and return the balance message received from carrier’s phone number.
- 6.19.2.** How it works: After accept balance command, tracker will remember the “mobile phone number”, carrier’s phone number and the code;
- 6.19.3.** And then send the code to carrier’s phone number, and forward the message from carrier to mobile phone number.

Following is an example of China mobile.



6.20. Cut off the Oil and Power System

- 6.20.1.** Send command “stop+password” to tracker, tracker will execute it and reply “Stop engine Succeed”. And it will remain immobile state until next command to resume.
- 6.20.2.** Stop mode configuration:
Execute immediately: Send command “quickstop+password” to tracker, it will reply “quickstop OK”. Then tracker will stop the car immediately after “stop” command.
Execute depends on speed(Default mode): Send command “noquickstop+password” to tracker, It will reply “noquickstop OK”, Then the tracker won’t stop the car immediately after “stop” command, instead, it will reply “it will be executed after speed less than 20KM/H”, and stop the car when the speed is less than 20KM/H.

6.20.3. Resume the Oil and Power System

Send "resume+password" to tracker, it will reply "Resume engine succeed", it means the oil supply is resumed.

6.21. Decide how many times of alarm message

You can decide how many times of the alarm message to be sent for those alarm messages sent in cycle, send SMS " xtime+password+005 " to tracker, alarm message will be sent 5 times once alarms are triggered .

Alarm SMS will be sent 5 times by default.

6.22. Alarms

6.22.1. Low battery alarm

6.22.1.1. Send SMS "lowbattery+password+space+on", it will send SMS "low battery+latitude/longitude" to authorized numbers 2 times in total **at 15 minutes interval** when voltage of battery is going to be about 3.55V.

6.22.1.2. This function activates by default, send SMS "lowbattery+password+space+off" to deactivate.

6.22.2. Power off alarm

6.22.2.1. This function is deactivated by default, Send " extpower+password+space+on" to activate, it will send SMS "power alarm+latitude/longitude" to authorized numbers every 3 minutes when external power is cut off.

6.22.2.2. Cancel: Send SMS "extpower+password+space+off" to deactivate it.

6.22.3. GPS blind Spot alert

6.22.3.1. This function deactivates by default, send SMS "gpssignal+password+space+on", it will send alert SMS "no gps+last valid latitude/longitude before lost signal"

6.22.3.2. Send SMS "gpssignal+password+space+off" to deactivate.

6.22.4. SOS

Press the SOS button for 3 seconds, the tracker device will send SMS "help me!+lat./long." to all the authorized numbers at interval of 3 minutes. It will stop sending such a SMS when any authorized number reply SMS "help me!" to the tracker.

6.22.5. Geo-fence

6.22.5.1. Set up a geo-fence for the tracker device to restrict its movements within a district.
The unit will send SMS to the authorized numbers when it goes out of this district.

6.22.5.2. Set up: When the unit stays immobile in a place for 3-10 minutes, the user can send SMS "stockade+password+space+latitude,longitude;latitude,longitude" to unit to set the restricted district. In case of breach, it will send SMS "stockade!+ latitude & longitude" to the authorized numbers.

Remark: The first latitude & longitude is coordinate of the top left corner of the Geo-fence, while the second latitude & longitude is the coordinate of the bottom right corner, it will send alarm SMS at interval of 3 minutes once beyond the restricted district.

6.22.5.3. Cancel: Send SMS "nostockade+password" to deactivate this function.

6.22.6. Multi-area management

6.22.6.1. Set Area

Send SMS command

"area+password+space+latitude,longitude+space+areaname,distanceM" to tracker(distance unit: M for meter, K for kilometer), it will reply "area01 ok".

Example: Send "area123456 22.353648,113.543678 school,800M".

Note: 5 areas at most and the distance between two points can't be less than the total distance in the 2 commands, and different areas can't cover each other.

6.22.6.2. Delete areas

Send SMS command:"noarea+password+space+area name", tracker will reply:"noarea ok".

6.22.6.3. Rename and set distance

Send SMS command "rename+password+space+old name;new name,distanceM" to tracker, if name is not repeated and area doesn't cover others, it will reply "rename ok!" for successful configuration.

Example: Send"rename123456 area01;school,800M", it means the new area name is "school", and covers area of a radius of 800 meters.

6.22.6.4. Activate multi-area management

Send SMS command "area+password+space+on" to tracker, it will reply "Area on ok!", when tracker enter the pre set area, it will send SMS "area name+latitude & longitude" to all the authorized phone number, and send same SMS when goes out of the area.

6.22.6.5. Deactivate Multi-area management

Send SMS command "area+password+space+off" to tracker, it will reply"area off ok!"

6.22.7. Movement alarm

6.22.7.1. Set up: when the unit stays immobile in a place for 3-10 minutes with GPS signal

reception, the user can send SMS“move+password+space+0200” to the tracker (Suppose area of a radius of 200 meters, it supports 4 digits at most. Unit: Meter). It will reply “move OK”. In case of such a movement (the default distance is 200m), it will send SMS “Move+ latitude & longitude” to the authorized numbers.

6.22.7.2. Cancel: Send SMS “nomove+password” to deactivate the movement alarm.

6.22.8. Over speed alarm

6.22.8.1. Set up: Send SMS “speed+password+space+080” to the unit (suppose the speed is 80km/h), and it will reply “speed OK!”. When the target moves exceeding 80km/h, the unit will send SMS “speed+080!+ latitude & longitude” to the authorized numbers ,it will send only one SMS in 3 minutes in SMS mode.

6.22.8.2. Cancel: Send SMS “nospeed+password” to deactivate the overspeed alarm.

Remark: The recommended speed should be not less than 30km/h. For below that rate, it will be effected the accuracy by GPS signals drift etc.

6.22.9. Shock sensor Alarm

The built-in shock sensor can detect it when the vehicle move, tilt or vibrate.

6.22.9.1. Activate Shock alarm: Send “shock+password” to tracker, it will reply “Shock is activated!”, “Sensor alarm+latitude&longitude will be sent to authorized phone number when detecting vibration.

6.22.9.2. Cancel: Send “noshock+password” to tracker to deactivate Shock alarm.

6.22.9.3. Configure sensitivity of vibration:

There are 3 different levels of the sensor:

First level: alarm will be triggered after detect slight vibration; send SMS command “sensitivity+password+space+1”;

Second level: alarm will be triggered after detect medium vibration; send SMS command “sensitivity+password+space+2”;

Third level: alarm will be triggered after detect heavy vibration; send SMS command “sensitivity+password+space+3”;

6.23. Sleep Mode

Sleep mode	SMS mode	GPRS mode	Set Less GPRS Traffic in GPRS Mode
No sleep	Always working	Always online	No vibration and any other triggered alarm, GPRS disconnect and switch to “sleep by Shock” in SMS mode, GPRS will back to online when detect vibration or any

			triggered alarm.
Sleep time by	SMS ,Calling or any triggered alarm(exclude Shock alarm) can awake the tracker to work for 5 minutes, after 5 minutes fall asleep again, GPS module shut off, GSM module work in low power consumption. SMS ,Calling, or any triggered alarm(exclude Shock alarm) can awake it.	Always online	When no vibration and no any triggered alarm, GPRS will disconnect and switch to “sleep by Shock” in SMS mode. GPRS will back to online when detect vibration or any triggered alarm.
Sleep Shock by	No vibration and no other triggered alarms, the unit will enter sleep by Shock with GPS module off, GSM module works in low power consumption. vibration, SMS, calling or any other alarms(includes Shock alarm) can awake the tracker to work.	Always online	When no vibration and no any triggered alarm, GPRS will disconnect and switch to “sleep by Shock” in SMS mode. GPRS will back to online when detect vibration or any triggered alarm.
Deep Sleep Shock by	No vibration and no other alarms, the tracker will enter sleep mode with GPS &GSM off and runs in minimum power consumption. SMS and calling cannot reach. Shock alarm and other hardware alarms trigger (e.g. SOS) can awake the tracker to work.	Always online	When no vibration and other hardware triggered alarm, GPRS disconnect and switch to “Deep Sleep by Shock” in SMS mode. GPRS will back to online when detect vibration or any hardware triggered alarm. SMS and calling cannot awake.

Awake according to schedule	After activate this mode, GSM and GPS are all off, SMS or calling cannot reach, tracker runs in minimum power consumption, it will awake and send awake report automatically at specific time and work for 5 minutes. During non-working time, SOS alarm can awake the tracker till SOS alarm is canceled. If Shock alarm activated, tracker will awake to work after detect Shock alarm until Shock alarm deactivated.	Working online according to the schedule, during non-working time, tracker will be offline and ready to awake according to schedule.	Working online according to the schedule, during non-working time, tracker will be offline and ready to awake according to schedule.
-----------------------------	---	--	--

6.23.1. Sleep by time

Send "sleep+password+space+time", tracker will reply "sleep time ok" if none of the alarms/alerts has been set and no operations in 5 minutes, tracker will fall asleep, GPS module shut off, and LED will be off too. Calling or SMS can awake the tracker. If alarms have been set, tracker will enter sleep by detecting vibration. And tracker sleeps by time by default.

6.23.2. Sleep by shock

Send SMS command "sleep+password+space+shock" to tracker, it will reply "sleep shock ok", and will enter sleep mode if no vibration is detected, GPS module shuts down, LED will be off . Vibration or any operation can awake the tracker. e.g. sleep123456 shock

6.23.3. Deep Sleep by Shock

Send "sleep+password+space+deepshock", tracker will reply "sleep deepshock ok" it will enter sleep mode if didn't detect vibration, GPS & GSM module shut off, and LED will be off too. Only vibration can awake it, and tracker will send awake message automatically after wake up.

6.23.4. Awake according to schedule

Send "schedule+password+space+1h ", It will awake every one hour, and automatically send location message after wake up. (m: minute; h: hour; d: day). The maximum time interval is set to three digits, and not more than 30 days. After sent this message, GPS & GSM module shut off, tracker runs in super lowest power consumption, calls or messages cannot awake it. Triggered alarm can awake the tracker to work normally, after alarm canceled, tracker come back to awake according to schedule again.

Cancel: After the tracker wake up, send "noschedule+password" to deactivate the function.

6.23.5. No sleep mode

Send SMS "sleep+password+space+off", it will reply "sleep off ok". Tracker won't sleep and GSM, GPS, LED always work

6.24. Check the Vehicle State

Send SMS command "check+password" to tracker, it will reply message including external power, battery, GPS signal, GSM signal, GPRS status, APN, UP, IP and port, etc.

E.g. send "check123456" to tracker, it will execute the command and reply following message:

Power: ON/OFF

Battery: 100%

GPRS: ON/OFF

GPS: OK/NO GPS

GSM Signal: 1-32 the higher, the better

APN: cmnet

UP:

IP: 104.250.138.146

PORT: 9000

6.25. Check IMEI

Send SMS "imei+password" to the tracker. For example, Send SMS "imei123456" to the tracker device, an IMEI number in 15 digits will be returned.

6.26. Terminal (local) Time Setting

Send SMS command “time+space+zone+password+space+time” to the tracker device, If executed, It will reply “time OK”

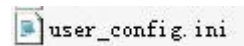
For example: Send SMS “time zone123456 8”, 8 is time zone of china, If your country locates in the Western Hemisphere, please add a minus before the time zone, for example, send SMS “time zone123456 -8”.

6.27. Reset Hardware

Send SMS command “reset+password” to tracker device, it will reply “reset ok”. And the GSM module and GPS module in the tracker will be reset.

6.28. Configure parameters by USB

Connect tracker to computer with the USB cable (option), and open



with notepad and operate it according to the examples.

Note: Correct password is necessary every time when you configure the tracker.

6.29. GPRS configuration

User must send SMS command via cell phone to set up APN, IP and port before starting tracking by GPRS.

6.29.1. Configure APN

APN standards for Access Point Name and differs from country to country. For more information about your local APN, please inquire with your local GPRS network operator.

Send SMS command to tracker “APN+password+Space+your local APN” via a cell phone and if executed, the tracker will reply “APN OK”.

For example: Send SMS command “APN123456 CMNET”. If executed, the tracker will reply “APN OK”.

Notes: 123456 refer to password of tracker and CMNET is the APN of Network Operator of china (China mobile).

6.29.2. Configure user, password for GPRS login

In most countries, the user name and password involving GPRS login are not compulsorily necessary, therefore, the entry can be skipped. For those countries requiring user name and password, please configure as following:

Send SMS “up+password+space+user+space+password”, If executed, tracker will reply

“user, password ok!”, for example: send SMS “up123456 jonnes 666666”

Note: 123456 is password of tracker, jonnes is the user name for GPRS login, 666666 is the password for GPRS login.

6.29.3. Configure IP and port

Send SMS “adminip+password+space+IP+space+port”, tracker will reply “adminip ok” if executed.

For example: send SMS “adminip123456 104.250.138.146 9000”, tracker will reply “adminip ok” if executed. (123456 is the password of tracker, and 104.250.138.146 is the ip, 9000 is the port.)

6.29.4. Switch to GPRS mode

6.29.4.1. Send SMS command “GPRS+password” to tracker, it will reply “GPRS ok!”, that means tracker have switched to work in GPRS mode.

6.29.4.2. TCP/UDP Switch

SMS command: “GPRS+password,0,0” is used to switch to TCP mode, TCP is the default mode.

SMS command: “GPRS+password,1,1” is used to switch to UDP mode.

6.29.4.3. Send SMS command: “SMS+password” to tracker, it will reply “SMS OK!”, and switch back to SMS mode.

6.30. Less GPRS traffic

6.30.1. Tracker will change to less GPRS traffic mode after parking 5 minutes, GPRS disconnect, and connect again when alarm being triggered or vehicle starts driving.

6.30.2. Activate this function: Send "less gprs123456 on", tracker will reply "less gprs on ok".

6.30.3. Deactivate this function: Send "less gprs123456 off", tracker will reply "less gprs off ok".

Note: 123456 is the password of tracker, and replace it with the new if you have changed.

6.31. Set up monitor center number

6.31.1. Setup: send command “centernum+password+space+number” to tracker, it will reply “centernum ok”. After setup monitor center number, the messages of auto track by sms will be set to this center number, if all alarms need to be sent to this number too, then this center number must be setup as authorized number.

6.31.2. Cancel monitor center number

Send “nocenternum+password” to tracker, it will reply “no center num ok”.

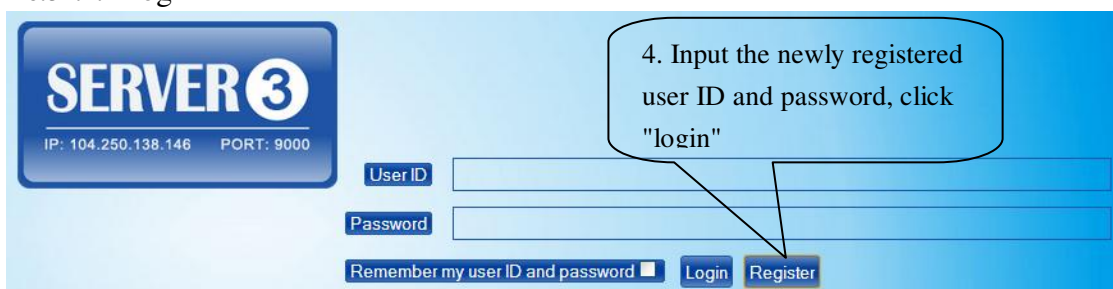
6.32. Instructions for web platform and mobile APP

Users need to register an account on www.gpstrackerxy.com before use web or APP platform, account name and password is the same on web/APP platform

6.32.1. Register an account



6.32.2. Login



6.32.3. Add a terminal

The screenshot shows the TrackerHome web interface. The 'Terminal Management' menu is open, showing options: Group Management, Account Management, and Change Password. A red circle on the map is labeled '5. add terminal'. Below the map is a table with terminal data.

Name	Date & Time	Description	Speed	Altitude	Oil1	Oil2	℃	ACC	Door	LBS	Latitude	Longitude
Demo	2015-04-16 08:27:01	Position info	0km/h	0.0m	0.0%	0.0%	0	Off	Close	No	22.586880	113.907718
Demo	2015-04-16 08:26:56	Geo fence had been clear.	0km/h	0.0m	0.0%	0.0%	0	Off	Close	No	22.586225	113.90794
Demo	2015-04-16 08:20:56	Position info	0km/h	0.0m	0.0%	0.0%	0	Off	Close	No	22.586225	113.907945
Demo	2015-04-16 08:20:37	Position info	0km/h	0.0m	0.0%	0.0%	0	Off	Close	No	22.586225	113.907945

The screenshot shows the 'Add Terminal' form. Callouts indicate the following steps:

- 6. add terminal (points to the 'Add' button)
- 7. enter IMEI (points to the 'IMEI NO.' field)
- 8. Device name (points to the 'Name' field)
- 9. choose location (points to the 'Icon' dropdown menu)
- 10. Save (points to the 'Add' button)

The screenshot shows the 'Terminal List' with a newly registered device 'demo' in grey, indicating it is offline.

11. The newly registered device is offline in grey color

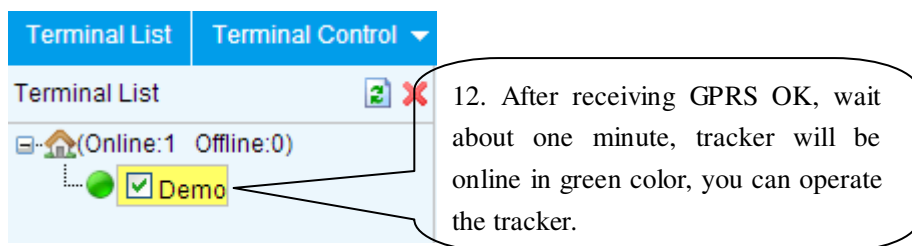
6.32.4. Configure your tracker to web platform to track it online

Step 1: set APN, refer to 6.29.1

Step 2: set GPRS user name and password, refer to 6.29.2

Step 3: set IP and port, please use the corresponding IP and port of the server you choose, refer to 6.29.3

Step 4: switch to GPRS mode, refer to 6.29.4



6.32.5. If the tracker is always offline (grey color), make sure the SIM card subscribe the GPRS service, and have money to surf the Internet, you can use phone to test the SIM card can surf the Internet or not.

please check the APN, user name, password, IP, port settings are correct, refer to 6.24.

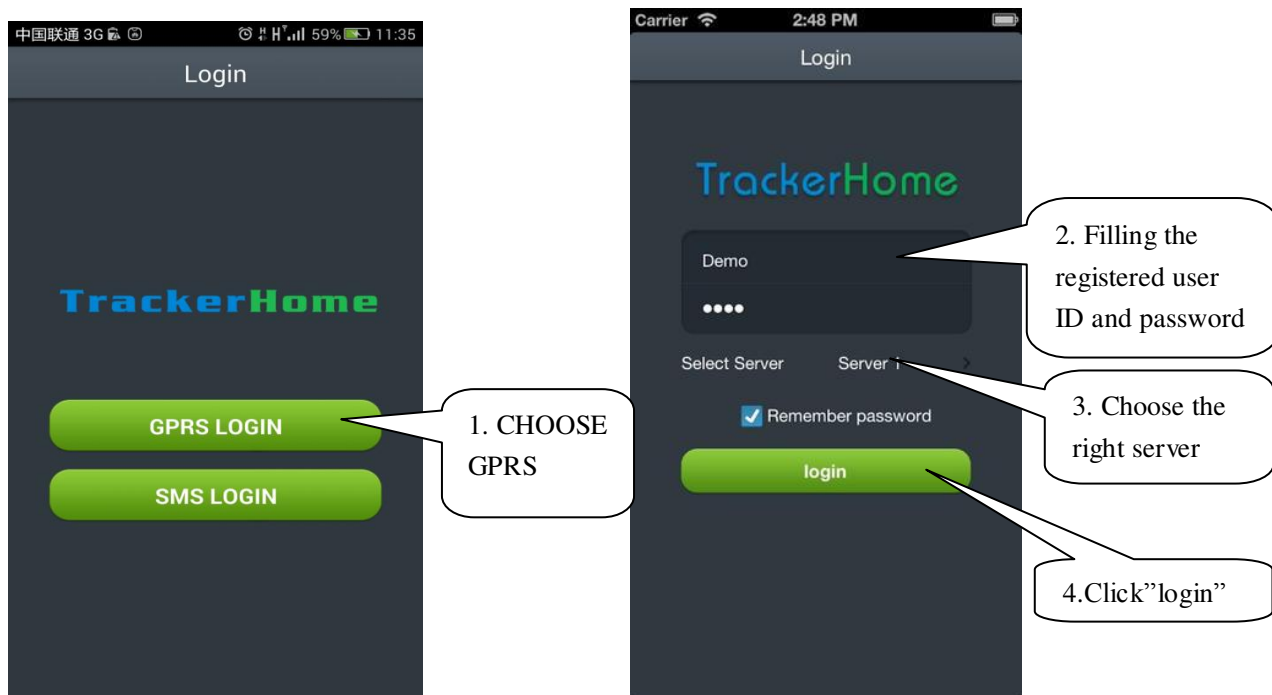
6.32.6. IOS & Android mobile APP

6.32.6.1. Download and install the mobile APP software

According to your phone type, download and install mobile app below the home page on web tracking platform.

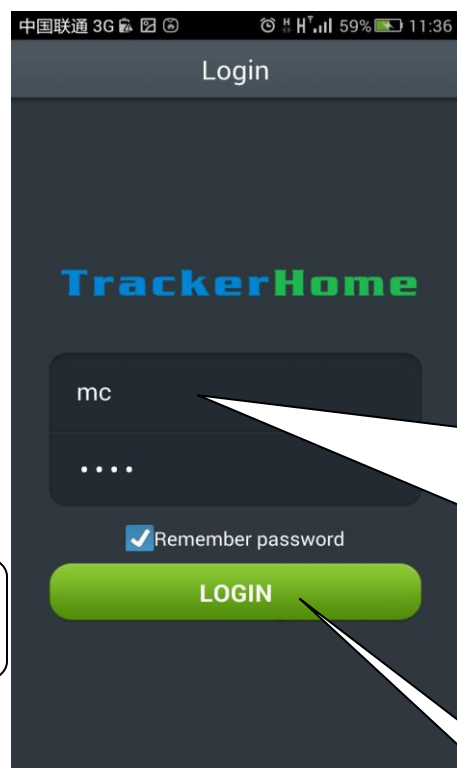
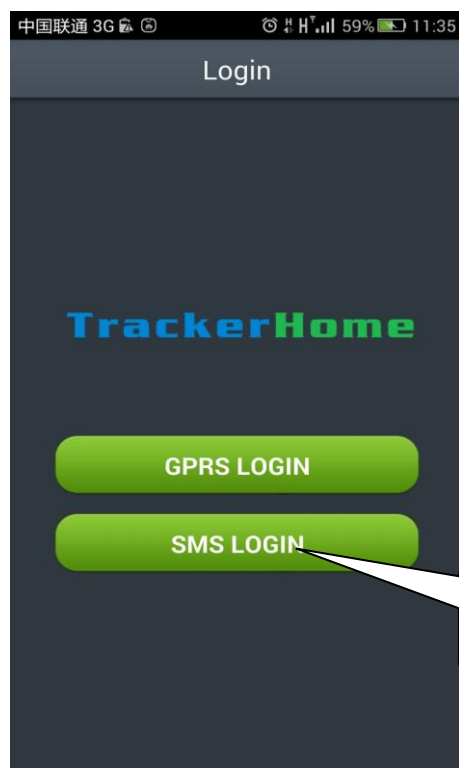


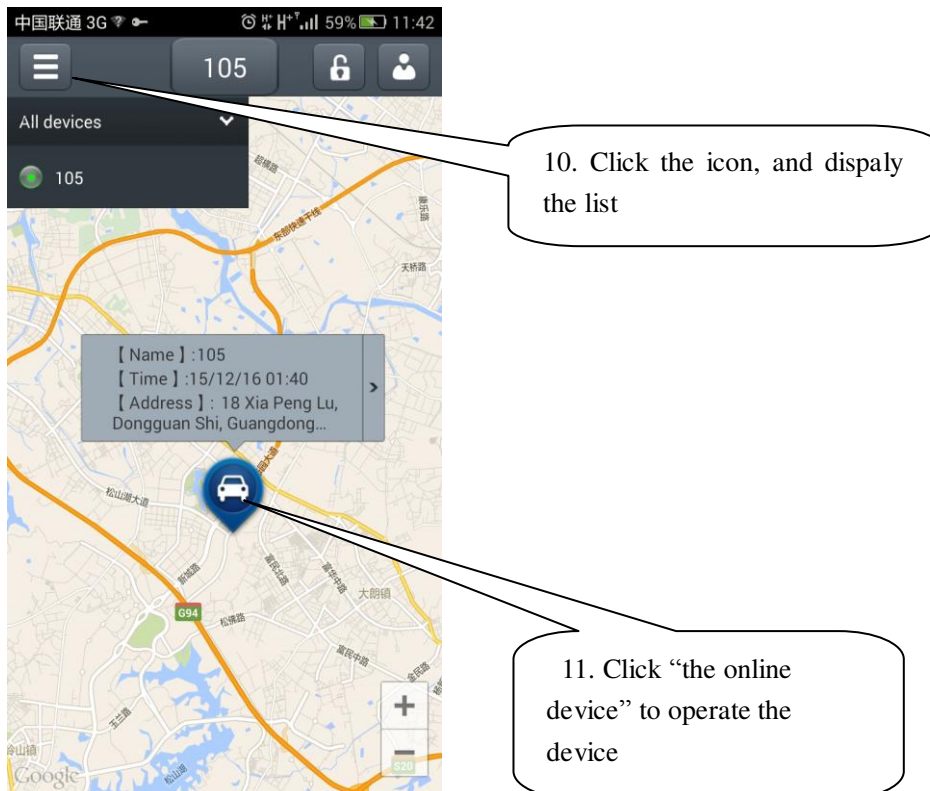
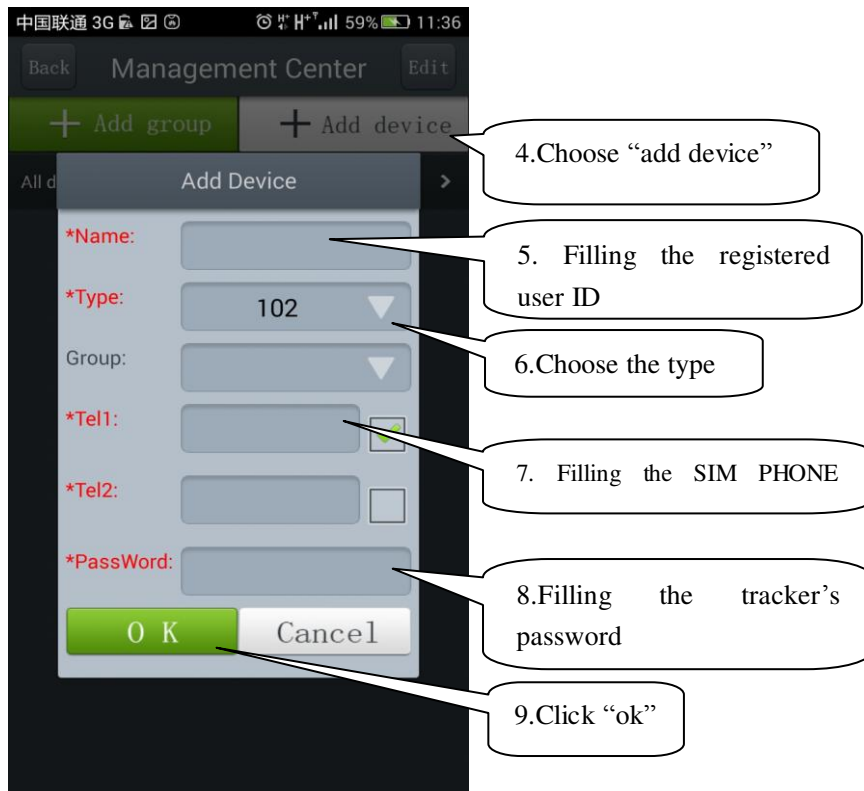
6.32.6.2 login in and use the mobile APP under GPRS

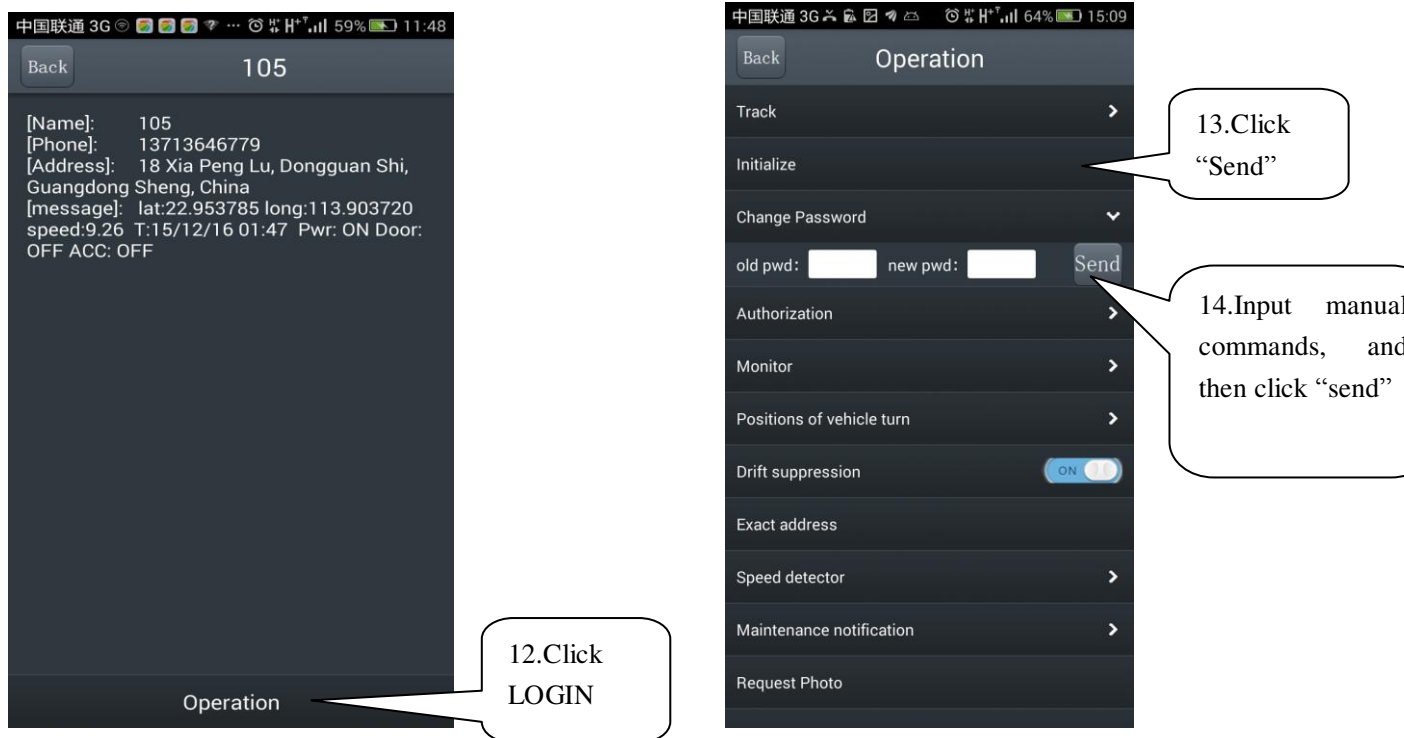




6.32.6.3 login in and use the mobile APP under SMS







Remarks: APP on Android phone can track the address and show alarm by SMS; IOS APP can only send commands due to the confine policy

7. Cautions

1. Don't put the unit in overheated or overcooled places.
2. Handle carefully. Don't vibrate or shake it violently.
3. Please use a dry cloth to clear and don't use chemicals and cleaners.
4. Please don't paint the device, this may lead to internal circuit failure.
5. Please don't disassemble the device.
6. Please read the user manual carefully before installation and operation, learn something more about the voltage range. Otherwise, it won't work properly or destroy the product.

8. Faults & the Solutions

Faults	Possible reason	Solution
Can't turn it on	Backup battery is low	Plug charger

No GSM signal	<ol style="list-style-type: none"> 1. GSM antenna didn't connect well. 2. SIM didn't load well. 	<ol style="list-style-type: none"> 1. Please check GSM antenna connection 2. Please check if SIM card load well or change another SIM card.
Hang off fail / monitor fail	Authorized phone number setup, and calling from non-authorized phone number	Please delete the authorized phone number or send command to initialize the settings to factory default settings.
Lost fix to GPS satellites	<ol style="list-style-type: none"> 1. GPS signal is not good 2. GPS antenna didn't connect well 	<ol style="list-style-type: none"> 1. put it in a place with more open view of sky 2. Please check GPS antenna connection
GPRS fail to be online	<ol style="list-style-type: none"> 1. APN, IP and port is not correct. 2. No GPRS subscription 3. Balance is not enough 	<ol style="list-style-type: none"> 1. Re-configure it 2. Subscribe GPRS service 3. Charge